

## Original Article

### Applying of theory of planned behavior to promote physical activity and exercise behavior among older adults

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#### Abstract:

Regular physical activity (PA) is foremost important for well-being and independent living in older age. However, recently, more than 75% of older adults have not been involved in any PA/exercise program at the suggested levels. Understanding their perspective towards PA/exercise provide important information in development of interventions for improving their exercise behavior. A conceptual framework that has been successfully applied for exercise behavior is the theory of planned behavior (TPB). The TPB has well shown the relationship between attitudes and PA/exercise behavior directly or indirectly through intention. Attitude, subjective norms and perceived behavioral control are three independent concepts of this theory. In fact, positive attitude, better perceived social pressure, and greater behavioral control result in stronger intention to perform a given behavior. PA/exercise intention is explained more by the TPB constructs in older compared to younger adults. Advancing age is associated with reduction in PA/exercise intention; however, the translation of intention to behavior increases. Furthermore, subjective norm and perceived behavioral control are considered as the strongest determinants of PA/exercise intention among older adults. Hence, the interventions targeting these factors will be valuable in promoting exercise behavior in the elderly.

**Key words:** aging, exercise intention, behavior, psycho-social theory

#### Introduction

The aging of the world's population is a most important demographic phenomenon of the 21<sup>st</sup> century (Armitage & Conner, 2001; Ahmad et al., 2011). It is estimated that by the year 2050 one in every five persons will be old (Mujahid, 2006). Population ageing has become an important challenge for both developed and developing countries (Ahmad et al., 2011), particularly in relation to their health (Nakasato & Carnes, 2006; Singh & Hiatt, 2006; Lin et al., 2010). With advancing age, age-related illnesses, particularly chronic and degenerative conditions and their related disabilities become more obvious (Schulz et al., 2004). In this view, the major public health targets are reducing of frailty and maintaining functional independence in older adults (Landi et al., 2010).

Regular physical activity (PA) or exercise has many lifelong health benefits (Netz et al., 2005; Lautenschlager et al., 2008). It is linked to prevention of chronic diseases (Schutzer & Graves, 2004; Kruk, 2007; Nigg et al., 2009), falls (Heesch et al., 2008), and disability (Wallin et al., 2008) in older age. Furthermore, it is advocated for preventing and optimally managing cardiovascular risk factors and reduction of heart-related death (Akbarabartoori et al., 2005; Sofi et al., 2008). Therefore, the more physically active old people are, the less probably to die early (Joseph et al., 2013). Regular PA plays a key role in maintaining and improving the quantity and quality of life (Elavsky et al., 2005; Guedes et al., 2012; Pernambuco et al., 2012). It is also well documented as an essential part of successful aging (Ní Mhaoláin et al., 2012). Generally, there is no other group who can benefit of exercise more than the old population (Breen et al., 2007).

Despite of the overwhelmingly PA-related health benefits, only a small number of old people meet the standard activity level of 30 to 60 minutes per day (Rahimi et al., 2011) and a high proportion of them are not physically active (Vallance et al., 2011). The prevalence of sedentary lifestyle increases with ageing process (Dumith et al., 2011), and it is one of the most important predictors of functional disability among the older adults (Landi et al., 2010). As, in 2010 more than three million deaths around the world were due to an inactive lifestyle (Bull & Bauman, 2011).